

REMARKS

Claims 1-20 remain in this application for further consideration in light of the foregoing remarks. The specification has been amended as set forth above to correct a minor typographical error. No new matter has been added.

I. Rejection of Claims 1-20 under 35 U.S.C. 102(b).

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,802,371 issued to Meier (hereinafter "Meier"). Applicants respectfully disagree with the rejection for the reasons set forth below.

Meier simply does not teach or otherwise suggest all the limitations set forth by Applicants' claims 1-20. Claims 1, 4, 11, 15, 19 and 20 are independent claims, while claims 2-3, 5-10, 12-14 and 16-18 ultimately depend therefrom, respectively.

Applicants' independent claim 1 specifically recites the following elements that are not taught or suggested by the Meier reference:

"an unwind rewriter programmed to generate a second plurality of blocks of metadata from the first plurality of blocks of metadata in response to a modification of the sequence of binary instructions within a procedure, such that the second plurality of blocks of metadata accurately represents the modified sequence of binary instructions." (Emphasis added).

Applicants' independent claim 4 specifically recites the following elements that are not taught or suggested by the Meier reference:

"regenerating new unwind data, based in part on information in the original unwind data, that represents the current order of basic blocks within the modified binary procedure; and writing the new unwind data to the modified binary procedure." (Emphasis added).

Applicants' independent claim 11 specifically recites the following elements that are not taught or suggested by the Meier reference:

"generating a second group of unwind data comprising a second unwind table and a second plurality of unwind descriptor records such that the second group

of unwind data *accurately represents the binary modification to the procedure*" (Emphasis added).

Applicants' independent claim 15 specifically recites the following elements that are not taught or suggested by the Meier reference:

"a second metadata field associated with a second group of instructions within the first procedure, wherein *the first metadata field and the second metadata field accurately reflect a flow of instructions of the basic blocks in the second order.*" (Emphasis added).

Applicants' independent claim 19 specifically recites the following elements that are not taught or suggested by the Meier reference:

"*parsing the first group of unwind data to identify a start basic block and an end basic block for a region associated with the procedure; and generating a second group of unwind data comprising a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure.*" (Emphasis added).

Applicants' claim 20 specifically recites the following elements that are not taught or suggested by the Meier reference:

"*regenerating new unwind data, based in part on information in the original unwind data, that represents the current order of basic blocks within the modified binary procedure; and writing the new unwind data to the modified binary procedure.*" (Emphasis added).

The cited reference does not teach all of the limitations that are recited in Applicants' independent claims 1, 4, 11, 15, 19 and 20. Moreover, the Meier reference does not teach or otherwise suggest any of the limitations set forth above. Instead, Meier addresses the problems associated with debugging distributed programs. (See Meier at col. 2, lines 34-40). As defined in Meier, a distributed program may include client-server or peer-to-peer applications. (See Meier at col. 1, lines 34-40). Meier teaches "a method of, and system for, determining the call relations of a distributed program without the performance overhead of recording relations in a table." (See Meier at col. 2, lines 18-23). Generally, Meier teaches that "a user may wish to debug the distributed set of client-server programs as if they were on a single program." (See Meier at col. 2, lines 18-23). Meier continues by teaching that "[t]he present invention meets this

need by providing a *distributed call stack*, wherein the call stacks of the client and the server are *appended together to form a single distributed call stack*." (See Meier at col. 4, line 66- col. 5, line 2). (Emphasis added). Meier addresses problems associated with the *call stack*; Meier does not teach, suggest or otherwise address procedures *at the binary level*. (See Meier at col. 2, lines 31-47). (Emphasis added).

Column 2 of Meier does not teach the aforementioned limitations of the present invention as suggested in the Office Action. Column 2 of Meire is a summary that specifically recites, in pertinent part, as follows:

"For example, when a breakpoint is encountered in an RPC server program while using a debugger for distributed programs, the *call stacks* for the client and server program are *appended together* into a *single distributed call stack*. In the case of nested RPC calls (e.g. program A executes an RPC call to program B which executes an RPC call to C and so on) all of the *call stacks are appended together* in the order they were created. The distributed call stack may span many programs, threads of execution, and computing machines.

The *distributed call stack may be used to select a routine from the call stack when setting a context for a tool that displays program state information*. For example, when the user selects a particular routine from the distributed call stack, the source listing, variables that are currently in scope, and thread executing the routine may be shown in various display windows." (See Meier at col. 2, lines 31-47). (Emphasis added).

Succinctly stated, Meier teaches splicing together a *call stack* from a client and a *call stack* from a server. As recited in claim 1, Meire does not teach "an unwind rewriter programmed to generate a second plurality of blocks of metadata...in response to a modification of the sequence of binary instructions within a procedure." As recited in claim 4, Meier does not teach "regenerating new unwind data...that represents the current order of basic blocks within the modified binary procedure; and writing the new unwind data to the modified binary procedure." Moreover, Meier fails to teach "generating a second group of unwind data comprising a second unwind table and a second plurality of unwind descriptor records such that the second group of unwind data accurately represents the binary modification to the procedure", as recited in claim 11. Meier also fails to teach "...the first metadata field and the second mctadata field accurately reflect a flow of instructions of the basic blocks in the second order", as recited in claim 15. Claim 19 specifically recites "...generating a second group of unwind data...such that the second

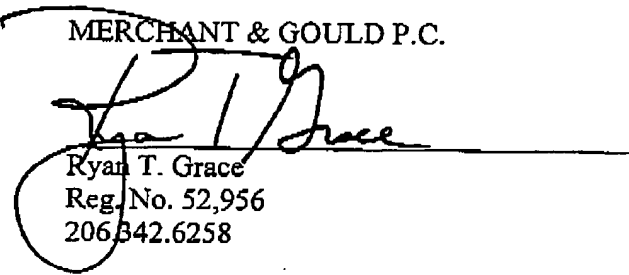
group of unwind data accurately represents the binary modification to the procedure", which is not taught by Meier. Furthermore, Meier fails to teach "regenerating new unwind data...that represents the current order of basic blocks within the modified binary procedure; and writing the new unwind data to the modified binary procedure" as recited in claim 20. Accordingly, independent claims 4, 11, 15, 19 and 20 are clearly allowable under 35 U.S.C. § 102(b).

Regarding claims 2-3, 5-10, 12-14 and 16-18, Applicants assert that the limitations of those claims are not taught or otherwise suggested by the cited art. Moreover, claims 2-3, 5-10, 12-14 and 16-18 ultimately depend from independent claims 4, 11, 15, 19 and 20, respectively. Claims 4, 11, 15, 19 and 20 are clearly allowable as more fully stated above. Accordingly, applicants assert that claims 2-3, 5-10, 12-14 and 16-18 are also allowable for at least those same reasons.

In view of the foregoing, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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